



QualiTest® Diagnostics

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August 11, 2025

Nucor General Recycling

Subject: July vibration survey

Most of the machines surveyed were found to be in good condition except for the following.

QualiTest® uses a four-step rating system for defects.

Class I: Defect is present, but effect on reliability is not clear; no immediate action is required. Continue to normally monitor.

Class II: Defect (s) present that may cause problem in long term (2-6 months). Repair during normal maintenance scheduling. Continue to monitor.

Class III: Defect (s) present that may cause failure in short term (less than 2 months). This should be addressed as soon as practical, with a high maintenance priority. Increase monitoring frequency.

Class IV: Defect (s) present that makes continued reliability unpredictable, and possibility of secondary damage is high. Repairs should be made ASAP. An unscheduled shutdown should be considered for repairs

Hi-Speed Industrial Service tests and inspects industrial machinery and equipment and makes recommendations concerning maintenance and repairs based on its experience in the field of industrial repair and maintenance. The information contained herein is provided as an opinion only, not as a guaranty or warranty of the matters discussed herein.

As always, it has been a pleasure to serve Nucor General Recycling. If there are any comments or questions, do not hesitate to contact us.

Sincerely,

ISO Certified Vibration Analyst, Category III



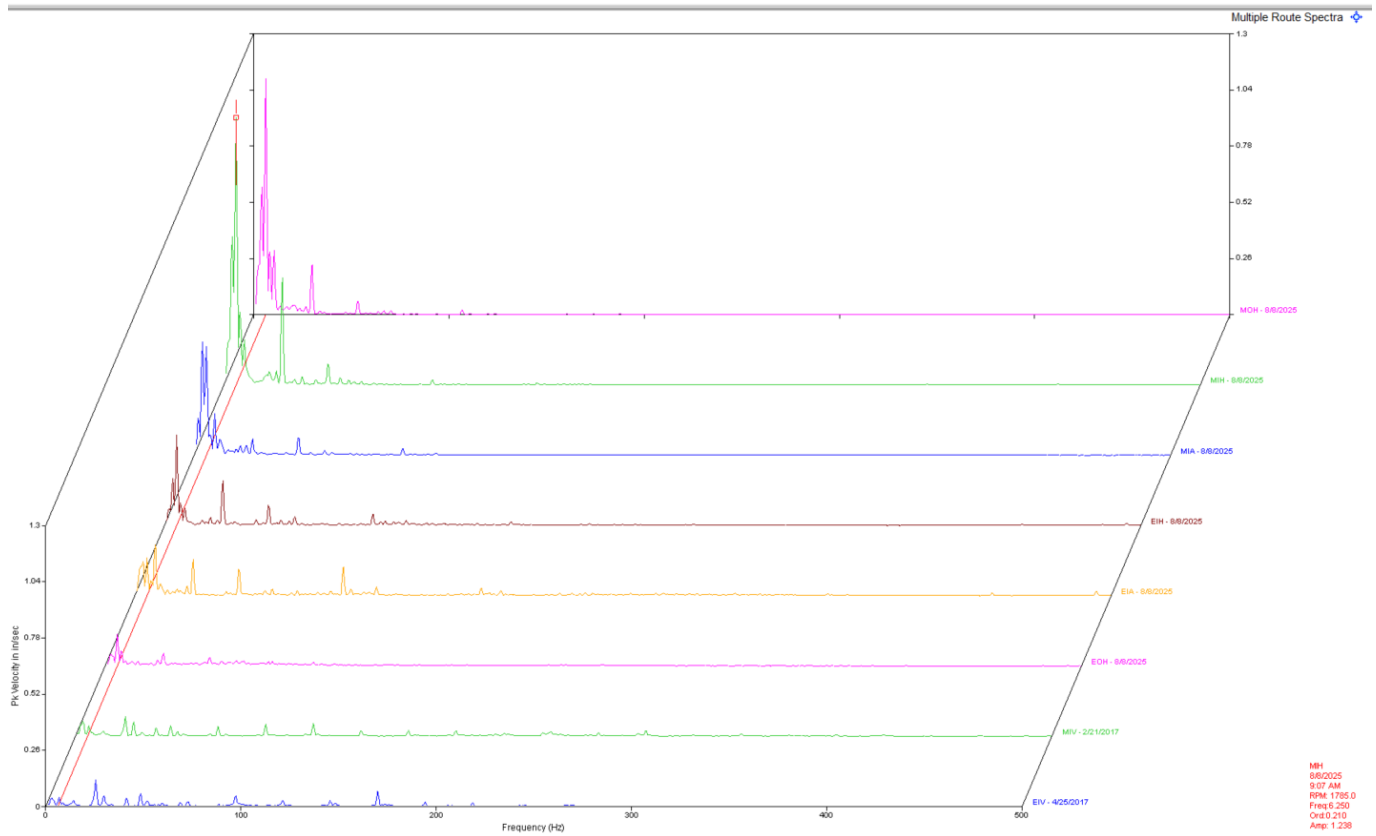
QualiTest® Diagnostics

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Defects

nucorja9.rbm / SCYD / NUMBER 11



Conveyor 11

Overall vibration is lower since last survey but still remains above alarm level. Vibration appears to be at a low frequency of 2 Hz. This may be belt frequency or gear drive output frequency. Ensure sheaves are aligned properly. Check motor base for looseness, cracks, etc. Gearbox data also shows some signs of internal wear. Rated as a **CLASS II** defect.

Abbreviated Last Measurement Summary

Database: nucorja9.rbm
 Station: Scrap Yard

MEASUREMENT POINT -----	OVERALL LEVEL -----	HFD / VHFD -----
SHREDDER - SHREDDER		
		(08-Aug-25)
	OVERALL LEVEL	1K-20KHz
MOH	.147 In/Sec	.088 G-s
MOV	.167 In/Sec	.096 G-s
MIV	.243 In/Sec	.237 G-s
MIH	.153 In/Sec	.195 G-s
MIA	.182 In/Sec	.197 G-s
CYCLONE - CYCLONE		
		(08-Aug-25)
	OVERALL LEVEL	1K-20KHz
MOH	.243 In/Sec	2.840 G-s
MIH	.219 In/Sec	1.966 G-s
MIA	.269 In/Sec	.917 G-s
M3 - MAG DRUM		
		(08-Aug-25)
	OVERALL LEVEL	1K-20KHz
MOH	.084 In/Sec	.133 G-s
MIH	.070 In/Sec	.148 G-s
MIA	.084 In/Sec	.088 G-s
GIH	.041 In/Sec	.082 G-s
GOH	.045 In/Sec	.082 G-s
IDB	.039 In/Sec	.0046 G-s
ODB	.032 In/Sec	.0040 G-s
NUMBER 11 - NUMBER 11		
		(08-Aug-25)
	OVERALL LEVEL	1K-20KHz
MOH	1.421 In/Sec	1.229 G-s
MIH	1.718 In/Sec	.987 G-s
MIA	.877 In/Sec	1.010 G-s
EIH	.629 In/Sec	3.205 G-s
EIA	.555 In/Sec	3.951 G-s
EOH	.248 In/Sec	.474 G-s

 Clarification Of Vibration Units:

Acc --> G-s RMS
 Vel --> In/Sec PK